

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/047525 A1

- (51) International Patent Classification⁷: C12Q 1/00, 1/25 (74) Agent: F B RICE & CO.; 605 Darling Street, Balmain, NSW 2041 (AU).
- (21) International Application Number:
PCT/AU2004/001572 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date:
15 November 2004 (15.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2003906286 14 November 2003 (14.11.2003) AU
2003906285 14 November 2003 (14.11.2003) AU (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (for all designated States except US): GARVAN INSTITUTE OF MEDICAL RESEARCH⁷ [AU/AU]; St Vincent's Hospital, 384 Victoria Street, Darlinghurst, New South Wales 2010 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JAMES, David? [AU/AU]; 25 Cutler Road, Clontarf, New South Wales 2093 (AU). COONEY, Gregory James? [AU/AU]; 25 Albemarle Street, Marrickville, New South Wales 2204 (AU). MOLERO-NAVAJAS, Juan Carlos? [ES/AU]; 3/9 Dudley Street, Coogee, New South Wales 2034 (AU).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF VALIDATING TARGET FOR MODULATING INSULIN ACTION, SCREENING FOR MODULATORS OF INSULIN ACTION AND THERAPEUTIC USES THEREOF

(57) Abstract: The present invention provides several assay formats for determining the effect of compounds on one or more metabolism-associated phenotypes in a cell, tissue or animal. The assay formats are based upon the finding that Cbl (e.g., the protooncogene c-Cbl) is an upstream regulator of AMPK activity and ACC activity in muscle, and that this regulatory pathway modifies whole body energy expenditure and whole body insulin sensitivity.

WO 2005/047525 A1